FACT SHEET

BMDO FACT SHEET 122-00-11 Replaces Fact Sheet 122-00-06

BATTLE MANAGEMENT, COMMAND, CONTROL, AND COMMUNICATIONS

SYSTEM OVERVIEW

The Battle Management Command, Control, and Communications (BM/C3) Element plans and directs the activities required to design, develop, integrate, test, deploy, and maintain a National Missile Defense (NMD) system.

The BM/C3 Element consists of the hardware, software, and communications systems necessary for planning, tasking, and controlling the NMD system. BM/C3 enables the Commander to understand the situation, decide what to do, and control the defense of the nation against limited ballistic missile attacks.

BM/C3 provides mission and engagement planning, situation assessment, system response, human-in-control, and exercise of a central command and control of NMD. As such, BMC/3 is the central element of National Missile Defense which makes all the pieces work together, under human control, to achieve a system that accomplishes the NMD mission through all conflict levels.

Ballistic Missile Defense Organization,
External Affairs
7100 Defense Pentagon
Washington, D.C. 20301-7100
(703) 697-8472

BM/C3 ELEMENT DESCRIPTION

The BM/C3 Element provides the capability for the all the elements of NMD to function as a system and provides the capability for the Commander In Chief of the North American Air Defense/United States Space Command (CINCNORAD/CINCSPACE) to exercise control over the operation of the integrated NMD system. The BM/C3 Element includes:

The Battle Management, Command and Control (BM/C2) sub-element provides an automated target tracking, engagement planning capabilities and decision support displays. BM/C2 provides the means to plan for, assess, direct, coordinate, monitor, and control all aspects of the missile defense battle. To date, the BM/C2 sub-element has successfully completed rehosting BM/C2 software on a Joint Technical Architecture compliant infrastructure in preparation for future interoperability with existing Cheyenne Mountain Operations Center (CMOC) systems.

The NMD Communications Network sub-element provides the communication links among NMD elements. In addition, it supplies communications among NMD sites and network management as well as the interchange to external systems.

The In-flight Interceptor Communications System (IFICS) provides the communications links between the BM/C2 and the exoatmospheric kill vehicle (KV) during flight to its target. This link provides In-flight Target Updates (IFTUs), Target Object Maps (TOMs), and status information to the weapon. An IFICS prototype system has been installed at the Kwajalein Missile Range in support of development and test activities.

The External Interface Subsystem (EIS) allows the BM/C3 Element to communicate with the CMOC.

The Test Exerciser (Tex) sub-element is a software development tool that acts as the framework for hosting BM/C3 test articles and aids in integrating and testing software functionality for each software program release.

BM/C3 provides NMD operators the means to communicate with the CMOC. BM/C3 provides the means to communicate with existing and evolving external systems and centers such as the Missile Warning Center and communicate through CMOC to the National Command Authority (NCA). The communications component includes network management, IFICS for communications with the interceptor, and local and wide area communications linking all NMD elements and sites.